

## Curriculum Schedule for B.S. in Pharmaceutics Program of Jiangsu

### University (For 2011 Batch and later)

#### Program Objectives

The four-year B.S. in Pharmaceutics program prepares students for technical positions in the pharmacy production, control, and development sectors of the pharmaceutical industry or for graduate studies in pharmaceutics, medicinal chemistry/pharmacognosy, or analytical chemistry.

#### Requirements

Students admitted to the College's B.S. in Pharmaceutics Program are required to complete the general courses in the initial two years, which will equip the students with the tools of language and the basic concepts and procedures of academic inquiry needed for further study. After completing the general courses, each student must choose major courses in the third and fourth years, which are directly connected with the intensive specialization in principal areas of concentration, such as pharmaceutics, industrial pharmacy, biopharmaceutics and so on. In all the categories of general and major courses, there are required courses and electives. Upon graduation, the student must have completed investigations of graduation practice (dissertation) and other practice requirements. They are also required to have a good command of Chinese, get HSK certificate and be able to read Chinese literatures in pharmaceutical science.

#### Main Courses

The main courses include physical chemistry, chemical engineering principle, medicinal chemistry, pharmaceutical analysis, pharmacology, pharmaceutical polymers, industrial pharmacy, biopharmaceutics and pharmacokinetics, process design workshop.

### Curriculum Schedule

Code No.	Course name	Term	Credits	Total hours	Hours / week	Theory hours	Practic e hours	Require d or elective
A0101	Chinese (I) 汉语 (I)	1	5	75	5	75	0	Require d
A0102	Chinese (II) 汉语 (II)	2	5	75	5	75	0	Require d
A0103	Chinese (III) 汉语 (III)	3	5	75	5	75	0	Require d
A0104	Chinese (IV) 汉语 (IV)	4	5	75	5	75	0	Require d

A0200	HSK Test 汉语水平考试	5	2	30	2	30	0	Required
A0301	Pharmaceutical Chinese (I) 药 学 汉 语 (I)	6	4	60	4	60	0	Elective
A0302	Pharmaceutical Chinese (II) 药 学 汉 语 (II)	7	4	60	4	60	0	Elective
Code No.	Course name	Term	Credits	Total hours	Hours / week	Theory hours	Practic e hours	Required or elective
0121024 1	Medical Advanced Mathematics (A) 高等数学(医学类)A	1	5	75	5	75	0	Required
0621009 0	Basic of computer culture 计算机文化基础	1	2	30	2	20	10	Required
1321012 2	Inorganic Chemistry (B) 无机化学(医学类)B	4	4	60	4	40	20	Required
3021001 0	Physical Education (I) 体育(I)	1	2	30	2	30	0	Required
0621006 0	Computer Programming (VFP) 程序设计(VFP)	2	6	90	6	60	30	Required
1321027 1	Organic Chemistry (A) 有机化学 A	2	6	90	6	60	30	Required
3021002 0	Physical Education (II) 体育(II)	2	2	30	2	30	0	Elective
0121025 1	College Physics (B) 大学物理(医学类)B	3	3	45	3	45	0	Required
0121028 0	Experiment of College Physics (B) 大学物理实验(医学类)B	3	1.5	22	2	0	22	Required
3021003 0	Physical Education (III) 体育(III)	3	2	30	2	30	0	Elective
3021004 0	Physical Education (IV) 体育(IV)	4	2	30	2	30	0	Elective
3121001 0	Literature Retrieval 文献检索	4	1	15	1	11	4	Required
1421118 0	Anatomical Physiology 解剖生理学	1	4	60	5	60	0	Required
1421119 0	Experiment of Anatomical Physiology 解剖生理学实验	1	1.5	20	2	0	20	Required
1427042 3	Cellular Biology (C) 细胞生物学 C	1	1	15	2	15	0	Required
1321001 1	Analytical Chemistry (A) 分析化学 A	2	7	105	7	60	45	Required
1321007 3	Physical Chemistry (C) 物理化学 C	3	4	60	4	45	15	Required

1421130 0	Medical Statistics 数理统计(医药)	3	3	45	3	45	0	Required
1521105 1	Biochemistry (A) 医用生物化学 A	3	6	90	6	60	30	Required
1421105 2	Pathophysiology (B) 病理生理学 B	4	3	45	3	30	15	Required
Code No.	Course name	Term	Credits	Total hours	Hours / week	Theory hours	Practic e hours	Required or elective
1521117 1	Microbiology (A) 微生物学 A	4	2.5	35	3	35	0	Required
1521118 2	Immunology (B) 免疫学 B	4	1.5	25	2	25	0	Required
1627230 0	Pharmaceutical Molecular Biology 药理学分子生物学	4	2	30	2	30	0	Required
1521116 0	Experiment of Pharmaceutical Molecular Biology 药理学分子生物学实验	4	1	15	1	0	15	Required
1421106 2	Pharmacology (B) 药理学 B	5	4	60	4	60	0	Required
1421135 0	Experiment of Pharmacology 药理学实验	5	2	30	2	0	30	Required
1621103 0	Pharmaceutical Analysis 药物分析	5	4	60	4	60	0	Required
1621104 0	Experiment of Pharmaceutical Analysis 药物分析实验	5	3	45	3	0	45	Required
1621105 0	Medicinal Chemistry 药物化学	5	3	45	3	45	0	Required
1621106 0	Experiment of Medicinal Chemistry 药物化学实验	5	3	45	3	0	45	Required
1621101 2	Medicinal Chemistry of Natural Products (B) 天然药物化学 B	6	3	45	3	45	0	Required
1621102 0	Experiment of Medicinal Chemistry of Natural Products 天然药物化学实验	6	3	45	3	0	45	Required
1627221 0	Pharmacognosy 生药学	6	3	45	3	45	0	Required
1621014 0	Experiment of Pharmacognosy 生药学实验	6	2	30	2	0	30	Required
0121023 0	Linear Algebra 线性代数	4	2	30	4	30	0	Elective
0321007 2	Chemical Engineering Cartography B	4	2	30	2	28	2	Elective

	化工制图 B							
06210010	Foundations of Computer Application 计算机应用基础	4	2	30	2	15	15	Elective
14211024	Histology and Embryology D 组织胚胎学 D	4	1	15	1	15	0	Elective
14270060	Laboratory Animal Science 实验动物学	4	1	15	1	12	3	Elective
Code No.	Course name	Term	Credits	Total hours	Hours / week	Theory hours	Practic e hours	Require d or elective
15270100	Parasitology 寄生虫学	4	1	15	1	15	0	Elective
16210150	Physical Pharmacy 物理药学	4	2	30	2	30	0	Elective
16272290	Stereochemistry 立体化学	4	2	30	2	30	0	Elective
14270490	Introduction to Traditional Chinese Medicine 中医学概论	5	2	30	2	30	0	Elective
16270230	Traditional Chinese Medicine Resource Science 中药资源学	5	2	30	2	30	0	Elective
16272200	Chinese Materia Medica 中药学	5	2	30	2	30	0	Elective
13211073	Chemical Engineering Principle 化工原理	5	2	30	2	30	0	Require d
13211112	Chemical Engineering Principle Experiment B 化工原理实验 B	5	1	15	1	0	15	Require d
16210071	Industrial Pharmacy A(I) 工业药剂学 A(I)	6	3	45	3	45	0	Require d
16210320	Industrial Pharmacy Experiment (I) 工业药剂学实验(I)	6	2	30	2	0	30	Require d
16210250	Preparation Equipment and Process Design Workshop 制剂设备与车间工艺设计	6	2	30	2	30	0	Require d
16270030	Biopharmaceutical Analysis 体内药物分析	6	2	30	2	30	0	Require d
16270020	Biopharmaceutical Analysis Experiments 体内药物分析实验	6	2	30	2	0	30	Require d
16210081	Industrial Pharmacy A(II) 工业药剂学 A(II)	7	2	30	2	30	0	Require d

1621033 0	Industrial Pharmacy Experiment (II) 工业药剂学实验(II)	7	1	15	1	0	15	Required
1627001 0	Biopharmaceutics and pharmacokinetics 生物药剂学与药物动力学	7	2	30	2	30	0	Required
1627006 0	Biopharmaceutics and Pharmacokinetics Experiments 生物药剂学与药物动力学实验	7	2	30	2	0	30	Required
1627004 0	Selected topics in modern pharmaceutics 现代药剂学导论	7	1	15	1	15	0	Required
Code No.	Course name	Term	Credits	Total hours	Hours / week	Theory hours	Practic e hours	Required or elective
1627013 0	Pharmacy Administration and Statute 药事管理与法规	7	2	30	2	30	0	Required
1627017 0	Pharmaceutical Polymers 药用高分子材料学	7	2	30	2	30	0	Required
1621022 0	Pharmaceutical Polymers Experiments 药用高分子材料学实验	7	1	15	1	0	15	Required
1627000 0	Formulas of Chinese Medicine 方剂学	6	2	30	2	30	0	Elective
1627019 0	Science of Processing Chinese Materia medica 中药炮制学	6	1	15	1	15	0	Elective
1527094 0	Pharmacology of Chinese Materia Medica 中药药理学	7	2	30	2	30	0	Elective
1627020 0	Pharmacy of Chinese Materia Medica 中药药剂学	7	2	30	2	30	0	Elective
1621031 0	Tissue Engineering 组织工程学	6	2	30	2	30	0	Elective
1627224 0	Biological Products and Technology 生物制剂工艺	6	2	30	2	30	0	Elective
1621012 0	The Formulation Research for the Biomacromolecule 生物大分子制剂研究	7	2	30	2	30	0	Elective
1621023 0	Vaccinology 疫苗学	7	1	15	1	15	0	Elective
1621018 0	Pharmaceutical Synthesis Reactions	6	2	30	2	30	0	Elective

	药物合成反应							
1627005 0	Drug Research and Development 新药研究与开发	6	1	15	1	15	0	Elective
1627025 0	Pharmaceutical Marketing 药品营销	6	1	15	1	15	0	Elective
1627227 0	Bioengineering 生物工程	6	2	30	2	30	0	Elective
1621013 0	Microencapsulated for the Bioactive Substances and Research Progress 生物活性物质的微囊化及其研究 进展	7	1	15	1	15	0	Elective
1621019 0	Pharmacoeconomics 药物经济学	7	2	30	2	30	0	Elective

### Practice education

Code No.	Course name	Term	Credits	Weeks	Required or elective
16260010	Hospitals and Plant Practice 医院和工厂见习	5	1	1	Required
16260040	Collection in the Field of Chinese Medicine 野外采集	6	1	1	Required
16260260	Comprehensive Experiments in Pharmaceuticals 药学综合实验	7	2	2	Required
16260020	Comprehensive Experiments in Chinese Traditional Medicine 中药学综合实验	7	2	2	Required
16260100	Graduation Practice (dissertation) 毕业实习 (论文)	8	16	16	Required